

-2-

SC0853AM
09/736,462Amendments to the Claims

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A packaged semiconductor device ~~An electronic device~~ comprising:

a leadframe having a die carrier and a plurality of leads having a first surface formed having bump indentations and a second surface formed having bump terminals; and

a semiconductor die having a surface supported by the die carrier, wherein the surface is formed with a plurality of conductive bumps for ~~directly~~ attaching to the plurality of bump indentations.

2. (Currently Amended) The packaged semiconductor device ~~electronic device~~ of Claim 1, wherein the top of the leads are coplanar with a die carrier.

3. (Currently Amended) The packaged semiconductor device ~~electronic device~~ of Claim 1, wherein the device is encapsulated using a one sided process.

4. (Previously Cancelled)

5. (Previously Cancelled)

6. (Currently Amended) The packaged semiconductor device ~~electronic device~~ of Claim 1, further comprising a mold lock region.

-3-

SC0853AM
09/736,462

7. (Currently Amended) The packaged semiconductor device~~electronic device~~ of Claim 1, further comprising two rows of leads.

8. (Currently Amended) The packaged semiconductor device~~electronic device~~ of Claim 1, further comprising four rows of leads.

9. (Currently Amended) The packaged semiconductor device~~electronic device~~ of Claim 1, wherein the bump indentations are v-shaped.

10. (Previously Withdrawn) A lead frame comprising a plurality of leads wherein each lead has a bump terminal formed by mechanically stamping the leads.

11. (Previously Withdrawn) The lead frame of Claim 10, further comprising a die carrier coplanar with the top of the leads.

12. (Previously Withdrawn) The lead frame of Claim 10, further comprising stress tabs coupled to the end of the leads.

13. (Previously Withdrawn) The lead frame of Claim 10, wherein the lead frame is made from copper.

14. (Previously Withdrawn) The lead frame of Claim 10, wherein the plurality of leads are arranged into two rows.

-4-

SC0853AM
09/736,462

15. (Previously Withdrawn) The lead frame of Claim 10, wherein the plurality of leads are arranged into four rows.

16. (Previously Withdrawn) The lead frame of Claim 10, further comprising a plurality of v-shaped notches formed on each lead or stress relief.

17. (Previously Withdrawn) A method of manufacturing a semiconductor device comprising:
providing a lead frame having a plurality of leads;
forming a plurality of bump terminals on the leads by stamping.

18. (Previously Withdrawn) The method of Claim 17, further comprising the step of coupling a semiconductor die to the bump terminals.

19. (Previously Withdrawn) The method of Claim 17, further comprising the step of encapsulating the semiconductor die using a one sided encapsulation process.

20. (Previously Withdrawn) The method of Claim 18, wherein the step of coupling a semiconductor die further comprise the step of wire bonding wire between the semiconductor die and the bump terminals.

21. (Previously Withdrawn) The method of Claim 18, wherein the step of coupling a semiconductor die further comprise the step of attaching a plurality of contact bumps on the semiconductor die to the bump terminals.

22. (Previously Withdrawn) The method of Claim 17, further comprising providing a die carrier associated with the leads.

23. (Previously Withdrawn) The method of Claim 17, further comprising the step of forming a plurality of v-shaped notches on the leads.

A method of manufacturing a semiconductor device comprising:
providing a lead frame having a plurality of leads;
forming a plurality of bump terminals on the leads by stamping;
providing a die carrier;
attaching a semiconductor die to the die carrier;
coupling the semiconductor die to the bump terminal.

24. (Previously Withdrawn) The method of Claim 21, further comprising the step of encapsulating the semiconductor die using a one sided encapsulation process.

25. (Previously Withdrawn) The method of Claim 21, wherein the step of coupling a semiconductor die further comprise the step of wire bonding wire between the semiconductor die and the bump terminals.

26. (Previously Withdrawn) The method of Claim 21, wherein the step of coupling a semiconductor die further comprise the step of attaching a plurality of contact bumps on the semiconductor die to the bump terminals.

-6-

SC0853AM
09/736,462

27. (Previously Withdrawn) The method of Claim 24, wherein the step of providing a lead frame further comprises forming a plurality of v-shaped notches in the leads.

28. (New) The packaged semiconductor device of Claim 1, wherein an outer portion of the plurality of leads is coplanar with an outer portion of the packaged semiconductor device.

29. (New) The packaged semiconductor device of Claim 1, wherein the die carrier and the plurality of leads comprise a same material.